AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seg.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

City of Attleboro
Department of Water and Wastewater
Government Center, 77 Park Street
Attleboro, MA 02703

Is authorized to discharge from a facility located at

Attleboro Water Pollution Control Facility
Pond Street
Attleboro, MA 02703

to receiving water named **Ten Mile River**,

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This Permit shall become effective on September 1, 2008.

This Permit and the authorization to discharge expire at midnight, five years from the effective date.

This Permit supersedes the permit issued on September 30, 1999.

This Permit consists of 14 pages in Part I including effluent limitations, monitoring requirements, etc., Attachment A (Freshwater Chronic Toxicity Test Procedure and Protocol), Attachment B (Reassessment of Technically Based Industrial Discharge Limits Form), and Attachment C (NPDES Permit Requirement for Industrial Pretreatment Annual Report), and 25 pages in Part II Standards Conditions.

Signed this 9th day of June, 2008

/S/ SIGNATURE ON FILE

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001 **(May 1 - October 31 unless otherwise noted)**. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Monitoring Requirement	
	Average Monthly	Average Weekly	Maximum Daily	Frequency	Type
Flow, MGD	8.6 [1]	----	----	daily	continuous
Flow, MGD [1]	Report		Report	daily	continuous
CBOD, mg/l (lbs/day) [2]	5 (359)	5 (359)	15 (1,077)	3/week	24-hr.comp.[3]
TSS, mg/l (lbs/day)[2]	5 (359)	5 (359)	15 (1,077)	3/week	24-hr.comp.[3]
pH, s.u.[4]		See I.A.4.b.		daily	grab
Fecal Coliform, CFU/100 ml[4,5]	200	----	400	2/week	grab
Total Residual Chlorine, ug/l [6,7]	15.4	----	26.6	3/day	grab
Ammonia-Nitrogen, mg/l (lbs/day)					
(May 1 - May 31)	4.2	----	----	3/week	24-hr.comp.[3]
(June 1- October 31)	1.5 (108)	1.5 (108)	2.5	3/week	24-hr.comp.[3]
Total Phosphorus, mg/l (April 1 - October 31) [8]	0.1	----	Report	3/week	24.hr.comp.[3]
Total Phosphorus, lbs/day (April 1 - October 31)	Report	----	----	3/week	24.hr.comp.[3]
Total Nitrogen, mg/l [9]	8.0	----	Report	3/week	24-hr.comp.[3]
Total Nitrogen, lbs/day	Report	----	----	3/week	24.hr.comp.[3]
Dissolved Oxygen, mg/l [4]		See I.A.4.c.			
LC50 [10,11]	----	----	100%	4/year	24-hr.comp.[3]
C-NOEC [10,12]	----	----	71%	4/year	24-hr.comp.[3]

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001 **(November 1 - April 30 unless otherwise noted).** Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Monitoring Requirement	
	Average Monthly	Average Weekly	Maximum Daily	Frequency Frequency	Sample Type
Flow, MGD	8.6 [1]	----	----	daily	continuous
Flow, MGD [1]	Report		Report	daily	continuous
CBOD, mg/l (lbs/day) [2]	15 (1077)	25 (1794)	30 (2,153)	3/week	24-hr. comp.[3]
TSS, mg/l (lbs/day) [2]	15 (1077)	25 (1794)	30 (2,153)	3/week	24-hr. comp.[3]
pH, s.u.[4]		See I.A.4.b.		daily	grab
Fecal Coliform [4,5]	200	-----	400	2/week	grab
Total Residual Chlorine, ug/l [6,7]	15.4	-----	26.6	3/day	grab
Ammonia Nitrogen, mg/l					
(November 1- November 30)	8.3	----	----	2/week	24-hr. comp.[3]
(December 1- April 30)	12.5	----	----	2/week	24-hr. comp.[3]
Total Nitrogen, mg/l [9]	Report	----	Report	1/week	24-hr. comp.[3]
Total Phosphorus, mg/l [13]					
(November 1 - March 31)	1.0	----	Report	2/week	24-hr. comp.[3]
Dissolved Ortho Phosphorus [13]					
(November 1 - March 31)	Report	----	Report	2/week	24-hr. comp.[3]
Dissolved Oxygen, mg/l [4]		See I.A.4.c.		daily	grab
LC50 [10,11]	------	-----	100%	4/year	24-hr. comp.[3]
C-NOEC [10,12]	------	-----	>71%	4/year	24-hr. comp.[3]

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Monitoring Requirement	
	Average Monthly	Average Weekly	Maximum Daily	Frequency Frequency	Sample Type
Total Recoverable Metals ug/l[14]					
Copper	13.0		19.6	2/month	24-hr. comp.
Silver	----		5.3	2/month	24-hr. comp.
Nickel	73.1		----	2/month	24-hr. comp.
Lead	4.5		----	2/month	24-hr. comp
Aluminum	122		950	2/month	24-hr. comp.
Cadmium	0.4		2.9	2/month	24-hr. comp.
Cyanide	6.3		30.8	1/month	24-hr. comp.

All sampling shall be representative of the effluent that is discharged through outfall 001 to the Ten Mile River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. In addition, all samples shall be analyzed using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

Footnotes:

1. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's DMR will report the annual average flow that is calculated from that month and the previous 11 months. The monthly average and maximum daily flows for each month shall also be reported.

2. Sampling required for influent and effluent.

3. A 24-hour composite sample will consist of at least twenty four (24) grab samples taken during one working day, either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.

4. Required for state certification. Dissolved oxygen monitoring shall be conducted before 8:00 a.m.

5. Fecal coliform discharges shall not exceed a monthly geometric mean of 200 colony forming units (cfu) per 100 ml, nor shall they exceed 400 cfu per 100 ml as a daily maximum. This monitoring shall be conducted concurrently with the TRC sampling.

6. The minimum level (ML) for total residual chlorine is defined as 20 ug/l. This value is the minimum level for chlorine using EPA approved methods found in the most currently approved version of Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G, or USEPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 20 ug/l, compliance/non-compliance will be determined based on the ML. Sample results of 20 ug/l or less shall be reported as zero on the discharge monitoring report.

   The monthly DMR shall include an attachment documenting the individual grab sample results for each day, including the date and time of each sample, and a summary of any operational modifications implemented in response to sample results. All test results shall be used in the calculation and reporting of the monthly average and maximum daily data submitted on the DMR (see Part II. Section D.1.d.(2)).

7. Chlorination and dechlorination systems shall include an alarm system for indicating system interruptions or malfunctions. Any interruption or malfunction of the chlorine dosing system that may have resulted in levels of chlorine that were inadequate for achieving effective disinfection or interruptions or malfunctions of the dechlorination system that may have resulted in excessive levels of chlorine in the final effluent shall be reported with the monthly DMRs. The report shall include the date and time of the interruption or malfunction, the nature of the problem, and the estimated amount of time that the reduced levels of chlorine or dechlorination chemicals occurred.

8. Consistent with Section B.1 of Part II of the Permit, the Permittee shall properly operate and maintain the phosphorus removal facilities in order to obtain the lowest effluent concentration possible.

9. This permit limit is a requirement of the U. S. Environmental Protection Agency (EPA) permit and is not a requirement of the Massachusetts Department of Environmental Protection (MassDEP) permit. Total Nitrogen is the sum of TKN, NO_2, and NO_3. The permittee shall operate the treatment facility to reduce the discharge of total nitrogen during the months of November - April to the maximum extent possible, using all available treatment equipment in place at the facility. The addition of a carbon source that may be necessary in order to meet the total nitrogen limit during the months of May - October is not required during the months of November - April.

10. The permittee shall conduct chronic (and modified acute) toxicity tests four times per year. The chronic test may be used to calculate the acute LC_{50} at the 48 hour exposure interval. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected during the second week of the months of February, May, August, and November. The test results shall be submitted by the last day of the month following the completion of the test. The results are due March 31st, June 30th, September 30th, and December 31st respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Dates Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}**	**Chronic Limit C-NOEC**
February May August November	March 31st June 30th September 30th December 31st	Ceriodaphnia dubia (daphnid) See **Attachment A**	≥ 100%	≥ 71%

Toxicity tests shall be performed using receiving water collected from the Ten Mile River upstream of the Attleboro discharge and downstream of the North Attleboro discharge for dilution. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV, DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document ("Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance Document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be

transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

11. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

12. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "71 % or greater" limit is defined as a sample which is composed of 71% (or greater) effluent, the remainder being dilution water.

13. The Permittee shall comply with the 1.0 mg/l monthly average total phosphorus limit within one year of the issuance date of the permit. The maximum daily concentration value reported for dissolved ortho phosphorus shall be the value from the same day that the maximum daily total phosphorus concentration was measured.

14. Total recoverable silver, lead, copper, and cadmium shall be measured using the Furnace Atomic Absorption method and total cyanide shall be measured using the Flame Atomic Absorption method. The MLs for silver, lead, copper, cadmium, and cyanide, respectively, are 2 ug/l, 3 ug/l, 3 ug/l, 0.5 ug/l, and 10 ug/l. Any effluent value for these five parameters which is below its respective ML shall be reported as zero.

    Total recoverable values of all other metals may be measured using either the Inductively Coupled Plasma ICP method or the Furnace AA method.

Part I.A.4.

a. The discharge shall not cause a violation of the water quality standards of the receiving waters.

b. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 at any time.

c. The discharge shall maintain a minimum dissolved oxygen of 6.0 mg/l at all times.

d. The discharge shall not cause objectionable discoloration of the receiving waters.

e. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

f. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and carbonaceous biochemical oxygen demand. The

percent removal shall be based on monthly average values.

g. The results of sampling for any parameter above its required frequency must also be reported.

h. The permittee shall, when the average annual flow exceeds eighty percent (80%) of the permitted facility's design flow, submit a report to the MassDEP describing what steps the permittee will take in order to remain in compliance with the limitations and conditions in its permit, including in particular, limitations on the amount of flow authorized to be discharged under the permit.

5. All POTWs must provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category discharging process water; and

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For purposes of this paragraph, adequate notice shall include information on:

(1) the quantity and quality of effluent introduced into the POTW; and

(2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

6. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

7. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. DEVELOPMENT OF LIMITATIONS FOR INDUSTRIAL USERS

a. Pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.

b. The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond. Within 120 days of the effective date of this permit, the permittee shall prepare and submit a written technical evaluation to the EPA analyzing the need to revise local limits. As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee shall complete and submit the attached form **Attachment B** with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 300 days of notification by EPA and submit the revisions to EPA for approval. The Permittee shall carry out the local limits revisions in accordance with EPA's Local Limits Development Guidance (July 2004).

C. INDUSTRIAL PRETREATMENT PROGRAM

a. The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, 40 CFR 403. At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

1. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.

2. Issue or renew necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.

3. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.

4. Maintain an adequate revenue structure for continued implementation of the

Pretreatment Program.

b. In accordance with 40 CFR Part 403.12(i), the permittee shall provide the EPA and the MassDEP with an annual report describing the permittee's pretreatment program activities for the twelve month period ending December 31. The annual report shall be consistent with the format described in **Attachment C** of this permit and shall be submitted no later than March 1st of each year.

c. The permittee must obtain approval from EPA prior to making any significant changes to the industrial pretreatment program in accordance with 40 CFR 403.18(c).

d. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the Federal Regulations at 40 CFR 405 et. seq.

e. The permittee must modify its pretreatment program to conform to all changes in the Federal Regulations that pertain to the implementation and enforcement of the industrial pretreatment program. The permittee must provide EPA, in writing, within 180 days of this permit's effective date proposed changes to the permittee's pretreatment program deemed necessary to assure conformity with current Federal Regulations. At a minimum, the permittee must address in its written submission, if applicable, the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee will implement these proposed changes pending EPA Region I's approval under 40 CFR 403.18. This submission is separate and distinct from any local limits analysis submission described above.

D. UNAUTHORIZED DISCHARGES

The permit only authorizes discharges in accordance with its terms and conditions and only from the outfall listed in Part I A. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes DEP Regional Office telephone numbers). The reporting form and instruction for its completion may be found on-line at http://www.mass.gov/dep/water/approvals/surffms.htm#sso.

E. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this

permit.

2. Preventative Maintenance Program

   The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Infiltration/Inflow Control Plan:

   The permittee shall develop and implement a plan to control infiltration and inflow (I/I) to the separate sewer system. The plan shall be submitted to EPA and MassDEP **within six months of the effective date of this permit** (see page 1 of this permit for the effective date) and shall describe the permittee's program for preventing I/I related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and by-passes due to excessive I/I.

   The plan shall include:

   - An ongoing program to identify and remove sources of I/I. The program shall include the necessary funding level and the source(s) of funding.
   - An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows.
   - Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of I/I to the system.
   - An educational public outreach program for all aspects of I/I control, particularly private inflow.

   Reporting Requirements:

   A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and the MassDEP annually, **by March 31**. The summary report shall, at a minimum, include:

   - A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year.
   - Expenditures for any I/I related maintenance activities and corrective actions taken during the previous year.
   - A map with areas identified for I/I related investigation/action in the coming year.

- A calculation of the annual average I/I, the maximum month I/I for the reporting year.

- A report of any I/I related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit.

F. ALTERNATE POWER SOURCE

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate the Publicly Owned Treatment Works as defined at 40 CFR §403.3.

G. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

2. The permittee shall comply with the more stringent of either the state or federal (40 CFR part 503), requirements.

3. The requirements and technical standards of 40 CFR part 503 apply to facilities which perform one or more of the following use or disposal practices.

   a. Land application - the use of sewage sludge to condition or fertilize the soil.

   b. Surface disposal - the placement of sewage sludge in a sludge only landfill.

   c. Sewage sludge incineration in a sludge only incinerator.

4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g. lagoons and reed beds), or are otherwise excluded under 40 CFR 503.6.

5. The permittee shall comply with the 40 CFR, Part 503 regulations. Appropriate conditions contain the following elements:

   - General requirements
   - Pollutant limitations
   - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
   - Management practices
   - Record keeping
   - Monitoring

- Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

less than 290	1/ year
290 to less than1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.

8. The permittee shall **submit an annual report containing the information specified in the regulations by February 19**. Reports shall be submitted to the address contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal.

I. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
Southeast Regional Office - Bureau of Resource Protection
20 Riverside Drive
Lakeville, MA 02347

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

Reports required in Sections B and C (local limits and pretreatment program) shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention - Industrial Wastewater Section
One Winter Street
Boston, MA 02108

J. STATE PERMIT CONDITIONS

1. This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit (unless otherwise noted) are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, § 43.

2. Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

2. At any time MassDEP determines that additional water quality certification requirements are necessary to protect water quality and in lieu of requiring a discharger covered under a general permit to obtain an individual permit (314 CMR 3.06(8)), MassDEP may require an individual discharger to undertake additional control measures, BMPs, or other actions. MassDEP may exercise its authority to require the discharger to take these actions by imposing a condition in the general permit to that effect, or by taking an enforcement action against the discharger, or by any other means. Any such conditions shall be supplied to the permittee in writing.

3. Applicants may request a waiver from the pH limits listed in Part 1.1 by conducting a study to show that the pH of the discharge will not cause or contribute to a violation of the pH range listed in the state water quality standards (see 314 CMR 4.05). After receiving approval from MassDEP, the permittee may submit a written request to the EPA requesting a change in the permitted pH limit range. Upon receipt of this information EPA may modify the pH limit range(s) via a certified letter to be sent to the permittee. Until written notice is received by certified mail from the EPA indicating the pH limit range has been changed, the permittee is required to meet the appropriate pH limit range listed in Part 1.1.

vi. In addition, to the degree appropriate, based on monitoring levels of aluminum, the aluminum minimization program shall also include, to the maximum degree practicable:

(1) an examination of alternate procedures or improvements to current procedures that would increase the efficiency of solids or aluminum removal prior to the wastewater discharge to surface waters;
(2) an evaluation of using coagulants which do not contain aluminum; and,
(3) the procedures for handling Facility Wastes (Part 5.10.2.) outlined in the most current issuance of Chapter 5 of the MassDEP Guidelines for Public Water Systems.[1] To the extent the permittee determines any of the procedures are impracticable, the BMP plan should provide an evaluation and explanation to support this determination.

vii. A description of the training to be provided for employees to assure they understand the goals, objectives, and procedures of the BMP Plan, the requirements of the NPDES Permit, and their individual responsibilities for complying with the goals and objectives of the BMP Plan and the NPDES permit.

viii. Documentation of operational and preventive maintenance activities, equipment inspections, procedure audits, and personnel training. Also, records of the calculations done at the time of sampling must be maintained at the facility so that an inspector may verify that the sampling was properly conducted. All documentation of BMP Plan activities shall be kept at the facility for at least three years and provided to EPA or MassDEP upon request.

1.3 State Permit Conditions

1. This NPDES permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the MassDEP under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, Section 43. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. EPA. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

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[1] The Commonwealth of Massachusetts Department of Environmental Protection Bureau of Resource Protection Drinking Water Program, Guidelines and Policies for Public Water Supplies. <available on-line at http://www.mass.gov/dep/water/laws/policies.htm#dwguid>

undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The permittee shall keep a copy of the current BMP Plan and all BMP Plan certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make it available for inspection by EPA and MassDEP.

e. The BMP Plan shall include, at a minimum, the following items:

i. A description of the pollution control equipment and procedures used to minimize the discharge to surface waters of suspended solids, floating solids, foam, visible oil sheen, and settleable solids, in order to comply with the permit requirements.

ii. Preventative maintenance procedures for the pollution control equipment to ensure that equipment failures are avoided.

iii. A description of where the solid material removed is to be placed, stored, or disposed of as well as the techniques used to prevent the removed solids from re-entering the surface waters from any on-site storage. If the material is to be removed from the site, describe who receives the material and its method of disposal and/or reuse.

iv. A record of the following information for all water additives used at the facility, (Water additives include chemicals used for coagulation, pH neutralization, dechlorination, control of biological growth, control of corrosion and scale in water pipes, etc.):

- Product name, chemical formula, and manufacturer of the additive;
- Purpose or use of the additive;
- Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each additive;
- The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the additive;
- If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

v. A program for minimizing the discharge of aluminum to surface waters, if it is used as a coagulant in the drinking water treatment process. The aluminum minimization program shall include, at a minimum:

(1) the specific procedures used to minimize the discharge of aluminum to surface waters while maintaining compliance with the Safe Drinking Water Act (SDWA) requirements, including 40 CFR §141.135, for removal of contaminants during treatment of raw water for drinking (e.g. baffles, filter press etc.); and,

(2) the procedures and schedules for removal of accumulated sludge from the filter backwash sedimentation basin or sludge treatment facility in order to maintain effective removal of solids prior to the wastewater discharge to surface waters.

shall be performed on a sample taken during normal facility operation. The results of the test (C-NOEC and LC_{50}) shall be forwarded to MassDEP and EPA no later than 30 days after completion of the test.

5. Any discharge that causes a violation of the water quality standards of the receiving waters is prohibited.

6. Any discharge of floating solids, foam, visible oil sheen, or settleable solids is prohibited.

7. The discharge shall not cause objectionable discoloration of the receiving water.

8. This permit does not allow the discharge of any water additives unless such additives are listed in the NOI. An exception to this requirement is allowed for additives not anticipated when the NOI was submitted, provided that the permittee notifies EPA and MassDEP within five (5) days of its use of the new additive. All water additives used by the facility, including those listed in the NOI, shall be listed in the BMP Plan as required by Part 9(e)(iv) of this General Permit. Examples of water additives include chemicals used for coagulation, pH neutralization, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

9. Best Management Practices (BMP) Plan

   a. The permittee shall develop, implement, and maintain a Best Management Practices (BMP) Plan designed to reduce or prevent the discharge of pollutants in wastewater to waters of the United States. The BMP Plan shall be a written document that is consistent with the terms of the permit and identifies and describes the BMPs employed by the facility in operating wastewater controls (see Part 9(d) below).

   b. The BMP Plan shall be completed or updated and certified by the permittee within **90 days after the date of signature on the EPA authorization letter for coverage under this general permit.** The permitee shall certify the BMP Plan has been prepared, that it meets the requirements of this permit, and that it reduces the pollutants discharged in wastewater to the extent practicable. The BMP Plan and certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of the BMP Plan and certification shall be maintained at the facility and made available to EPA and MassDEP upon request.

   c. The permittee shall amend and update the BMP Plan within 14 days for any changes at the facility affecting the BMP Plan. Such changes may include, but are not limited to changes in the design, construction, operation, or maintenance of the facility, which have a significant effect on the potential for the discharge of pollutants to the waters of the United States. The amended BMP Plan shall be certified as described in Part 9(b) above.

   d. The permittee shall certify at least annually that the facility is in compliance with the BMP Plan. If the facility is not in compliance with any aspect of the BMP Plan, the annual certification shall state the non-compliance and the remedies which are being

2. Any change in sampling locations provided in the NOI shall be reviewed and approved in writing by EPA and MassDEP. Any deviations from the sampling times provided in the NOI shall be documented in correspondence attached to the applicable discharge monitoring report (DMR) that is submitted to EPA. All samples shall be tested using the analytical methods found in 40 CFR Section 136 or alterative methods approved by EPA in accordance with the procedures in 40 CFR Section 136.

3. The total residual chlorine (TRC) monitoring and limits only apply to discharges of water which have been previously chlorinated or which contain residual chlorine. The maximum daily and average monthly concentrations of Total Residual Chlorine (TRC) allowed in the effluent are based on the appropriate water-quality criterion, which are listed below:

   - Freshwater acute (Class A or B) = 19 ug/l (0.019 mg/l); use for daily maximum
   - Freshwater chronic (Class A or B) = 11 ug/l (0.011 mg/l); use for average monthly
   - Marine acute (Class SA or SB) = 13 ug/l (0.013 mg/l); use for daily maximum
   - Marine chronic (Class SA or SB) = 7.5 ug/l (0.0075 mg/l); use for average monthly

   Effluent limits are calculated using the appropriate water quality criteria and the available dilution in the receiving water according to the following equation:

   Effluent Limit = (Dilution Factor) x (Water Quality Criteria)

   The daily maximum TRC limit shall be calculated using a dilution factor based on the daily maximum flow limit while the monthly average TRC limit shall be calculated using a dilution factor based on the monthly average flow limit. Dilution factor and mixing zone calculations must meet the Massachusetts Surface Water Quality Standards Implementation Policy for Mixing Zones (see Part III.I. of the Fact Sheet.) For discharges to freshwater streams, the dilution factor shall be calculated using the 7Q10 and the appropriate discharge rate from the facility (see Appendix VII.) For discharges to freshwater lakes and reservoirs and marine waters, the permittee may provide to EPA in the NOI a study or calculations in support of the applicable dilution factor. Prior to completing the NOI requirements for the PWTF GP, the State permitting authority must be contacted at the address listed in Appendix VI of the PWTF GP to determine and/or confirm the 7Q10 of the receiving water, dilution factor, other appropriate hydrologic conditions, or to request consideration of diffuser dilution. EPA will provide the permittee with the appropriately determined limits when notified of permit coverage.

   If the receiving water provides no available dilution, the acute and chronic criteria listed above shall be applied as the daily maximum and monthly average limits, respectively. If the appropriate water quality-based TRC limits are greater than 1.0 mg/l, a daily maximum limit of **1.0 mg/l** shall be applied to the discharge.

4. Chronic (and modified acute) toxicity test(s) shall be performed by the permittee upon request by EPA and/or MassDEP. Any testing shall be performed in accordance with EPA's toxicity protocol, a copy of which will be provided at the time of the request. Toxicity test protocols may be viewed at http://www.epa.gov/region1/npdes/epa_attach.html#epa. The test

4. There shall be no change from background conditions that would impair any uses assigned to the receiving water class. If addition of chemicals is required to achieve these pH limitations, such chemicals may be used, provided that they are identified either in the NOI or through subsequent communications with MassDEP and EPA. EPA, with MassDEP approval, may expand the pH range on a case-by-case basis when conditions warrant it (see Part 1.3.3).

5. The discharge shall not cause a change in pH of the receiving water more than 0.5 s.u. outside of the natural background conditions.

6. The discharge shall not cause a change in pH in the receiving water more than 0.2 s.u. outside of the natural background conditions.

7. Limits and monitoring for total residual chlorine are only required for discharges which has been previously chlorinated or which contains residual chlorine.

8. The minimum level (ML) for Total Residual Chlorine (TRC) is defined as 20 ug/l using EPA approved methods found in the most currently approved versions of Standard Methods for the Examination of Water and Wastewater: (1) Method 4500 CL-E; or (2) 4500 CL-G. One of these methods must be used to determine TRC. The ML is not the minimum level of detection, but rather the lowest point on the curve used to calibrate the test equipment for the pollutant of concern. If EPA approves a more sensitive method of analysis for TRC, the permit may be modified to require the use of the new method with a corresponding lower ML. Sample results at or below the ML shall be reported as zero on the discharge monitoring report.

9. Monitoring for total recoverable aluminum is only required for PWTFs that use an aluminum based coagulant.

10. The minimum level (ML) for analysis of Total Recoverable Aluminum shall be no greater than 20 µg/l. The ML is not the minimum level of detection, but rather the lowest point on the curve used to calibrate the test equipment for the pollutant of concern. Sample results at or below the ML shall be reported as zero on the discharge monitoring report.

11. Monitoring for Arsenic is only required when the PWTF is providing treatment to remove arsenic from the raw water source.

1.2. Other Requirements

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a location, and at consistent times of the month, that provide for representative analyses of the effluent just prior to discharge to the receiving water or, if the effluent is commingled with another discharge, prior to such commingling. Proposed sampling locations and times shall be provided in the NOI.

1.1 Discharge Limits and Monitoring Requirements

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge wastewaters from potable water treatment facilities. Each outfall discharging such wastewaters shall be limited and monitored as specified below.

Effluent Characteristics		Discharge Limitations		Monitoring Requirements	
Parameter	Units	Avg. Monthly	Max Daily	Monitoring Frequency	Sample Type[2]
Flow[1]	MGD	Report	1.0	1/Week	Estimate or Totalizer
TSS	mg/l	30	50	1/Week	Composite
pH[3] (Class A and B)	std units	6.5-8.3 range[4, 5]		1/Week	Grab
pH[3] (Class SA and SB)	std units	6.5-8.5 range[4, 6]		1/Week	Grab
Total Residual Chlorine[7, 8]	ug/l	See Part 1.2.3		1/Week	Grab
Aluminum, Total Recoverable[9, 10]	ug/l	----	Report	1/Month	Composite
Arsenic, Total Recoverable[11]	ug/l	----	Report	1/Month	Composite
LC_{50} & NOEC	%	See Part 1.2.4			Composite

Footnotes:

1. Discharge flow is limited to the average monthly and maximum daily rates applied for in the NOI. The daily maximum flow rate allowed by this general permit shall be no greater than 1.0 MGD.

2. The composite samples shall consist of at least 4 grab samples collected at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water after the start of a backwash cycle. The timing of grab samples for pH and total residual chlorine shall correspond with the timing of composite sampling for the other parameters.

3. Requirement for State Certification.

Part 1 MASSACHUSETTS GENERAL PERMIT, Permit No. MAG640000

In compliance with the provisions of the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.) and the Massachusetts Clean Waters Act, as amended (M.G.L. Chap. 21, sections 26-53), the following general permit authorizes discharges of wastewater from potable water treatment facilities (PWTF and PWTFs) in Massachusetts (including both Commonwealth and Indian Country lands) to all waters, unless otherwise restricted, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

PWTF treatment processes eligible for coverage under this general permit include clarification, coagulation, media filtration, membrane filtration (not including reverse osmosis), and disinfection. Discharges from other potable drinking water treatment processes may be included, if they are reported in the Notice of Intent (NOI) and attain the effluent limits and other conditions of this general permit.

Those discharges authorized by this general permit may be commingled with other discharges as long as the authorized discharge is monitored separately (prior to commingling) for compliance with the requirements of this general permit and any non-authorized discharge is either covered by another NPDES permit or excluded from requiring an NPDES permit by EPA regulation or statute.

The general permit shall become effective on the date of signature.

This general permit and the authorization to discharge supersedes the general permit issued on November 15, 2000, and will expire at midnight, 5 years from the last day of the month preceding the effective date.

Signed this 25 th day of September, 2009

/S/
Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, MA 02114

/S/
Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection, Commonwealth of Massachusetts,
Boston, MA 02108

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NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES) GENERAL PERMITS
FOR DISCHARGES FROM POTABLE WATER TREATMENT FACILITIES

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Permit Limits with DMR Data

ATTLEBORO WPCF

001A

Monitoring Location = 1

Aluminum, total recoverable

Limit Start Date = 11/1/99

Season = 0

Pram	MP Dt	Rec Dt	C1 210 ug/L MO AVG	C3 950 ug/L DAILY MX
01104	05/31/2007	6/11/07	46.5 ug/L	51 ug/L
01104	06/30/2007	7/15/07	66 ug/L	68 ug/L
01104	07/31/2007	8/7/07	102.5 ug/L	120 ug/L
01104	08/31/2007	9/7/07	115 ug/L	130 ug/L
01104	09/30/2007	10/4/07	145 ug/L	150 ug/L
01104	10/31/2007	11/8/07	205 ug/L	240 ug/L
01104	11/30/2007	12/7/07	0 ug/L	0 ug/L
01104	12/31/2007	1/4/08	0 ug/L	0 ug/L
01104	01/31/2008	2/6/08	18.5 ug/L	37 ug/L
01104	02/29/2008	3/7/08	40.5 ug/L	45 ug/L
01104	03/31/2008	4/4/08	0 ug/L	0 ug/L
01104	04/30/2008	5/9/08	15 ug/L	30 ug/L
01104	05/31/2008	6/9/08	190 ug/L	212 ug/L
01104	06/30/2008	7/9/08	96 ug/L	107 ug/L
01104	07/31/2008	8/7/08	189.5 ug/L	244 ug/L
01104	08/31/2008	9/9/08	125 ug/L	139 ug/L

Pram	MP Dt	Rec Dt	C1 210 ug/L MO AVG	C3 950 ug/L DAILY MX
01104	09/30/2008	10/7/08	121 ug/L	127 ug/L

Limit Start Date = 10/1/08

Season = 0

Pram	MP Dt	Rec Dt	C1 122 ug/L MO AVG	C3 950 ug/L DAILY MX
01104	10/31/2009	11/6/09	126 ug/L	139 ug/L
01104	11/30/2009	12/8/09	44 ug/L	46 ug/L
01104	12/31/2009	1/11/10	34 ug/L	38 ug/L
01104	01/31/2010	2/5/10	29.5 ug/L	33 ug/L
01104	02/28/2010	3/5/10	34.5 ug/L	37 ug/L
01104	03/31/2010	4/7/10	16.5 ug/L	33 ug/L
01104	04/30/2010	5/9/10	60.5 ug/L	78 ug/L
01104	05/31/2010	6/7/10	76 ug/L	90 ug/L
01104	06/30/2010	7/7/10	105.5 ug/L	113 ug/L
01104	07/31/2010	8/6/10	108 ug/L	120 ug/L
01104	08/31/2010	9/9/10	78.5 ug/L	109 ug/L
01104	09/30/2010	10/7/10	90.5 ug/L	112 ug/L
01104	10/31/2010	11/5/10	139 ug/L	160 ug/L
01104	11/30/2010	12/7/10	42 ug/L	44 ug/L
01104	12/31/2010	1/15/11	17.5 ug/L	19 ug/L
01104	01/31/2011	2/8/11	15.5 ug/L	17 ug/L
01104	02/28/2011	3/15/11	15 ug/L	16 ug/L
01104	03/31/2011	4/6/11	18 ug/L	23 ug/L
01104	04/30/2011	5/5/11	143 ug/L	200 ug/L
01104	05/31/2011	6/7/11	62 ug/L	70 ug/L
01104	06/30/2011	7/7/11	84 ug/L	100 ug/L
01104	07/31/2011	8/2/11	120 ug/L	120 ug/L